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Abstract Of The Disclosure

STABILE INVERT FUEL EMULSION COMPOSITIONS AND METHOD
OF MAKING SAME

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Method for producing high stability aqueous
fuel emulsions with an oil or fuel continuous phase.
The method provides for selectively combining
prescribed quantities of diesel fuel, purified water,
10 alcohol, and an additive package including a primary
surfactant, a block copolymer, and a polymeric
dispersant. The fuel emulsion is made by blending the
diesel fuel and additive package, adding purified
water to the fuel/additive mixture, aging the
15 composition, and passing the aged composition through
a high shear mixer. The optimum stability in the oil
continuous fuel emulsion is achieved by using a high
shear mixing device, such as a Ross X-series Mixer
Emulsifier, which results in the final fuel emulsion
20 having a droplet size distribution of about 1 micron
or less.

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